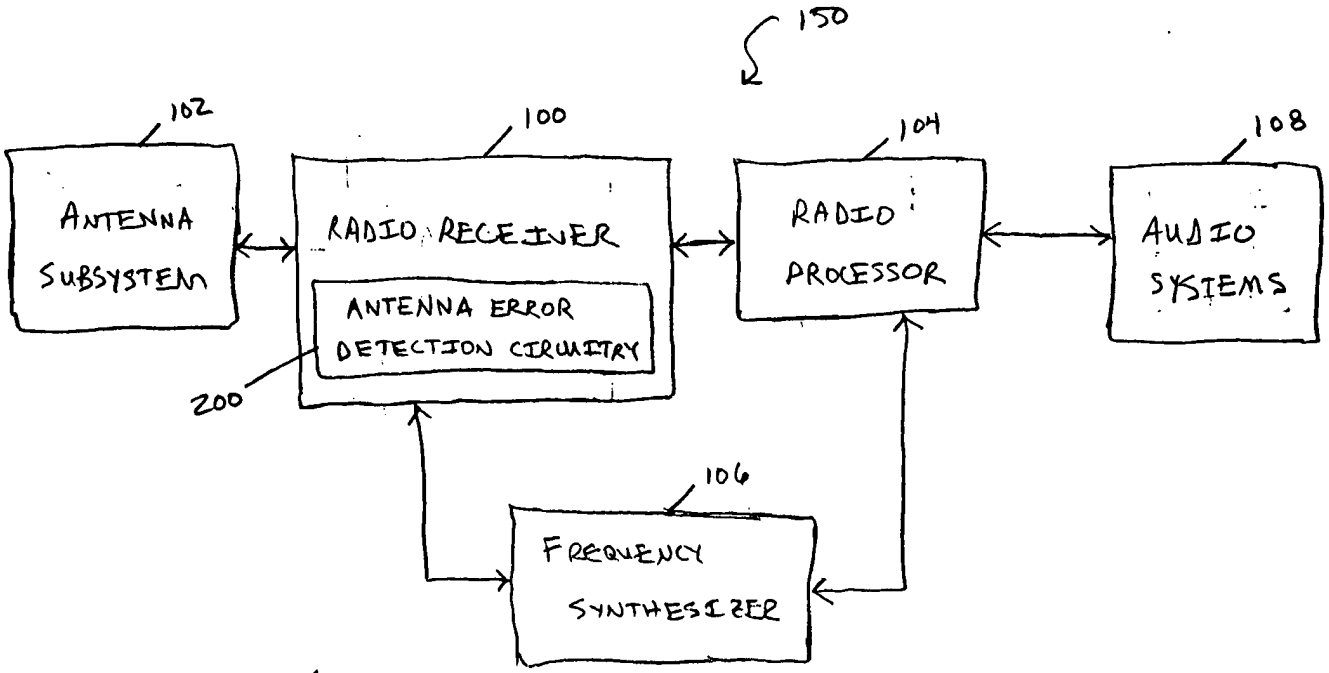
150
102
ANTENNA SUBSYSTEM
100
RADIO RECEIVER
ANTENNA ERROR DETECTION CIRUITRY
200
104
RADIO PROCESSOR
108
AUDIO SYSTEMS
106
FREQUENCY SYNTHESIZER

FIG. 1

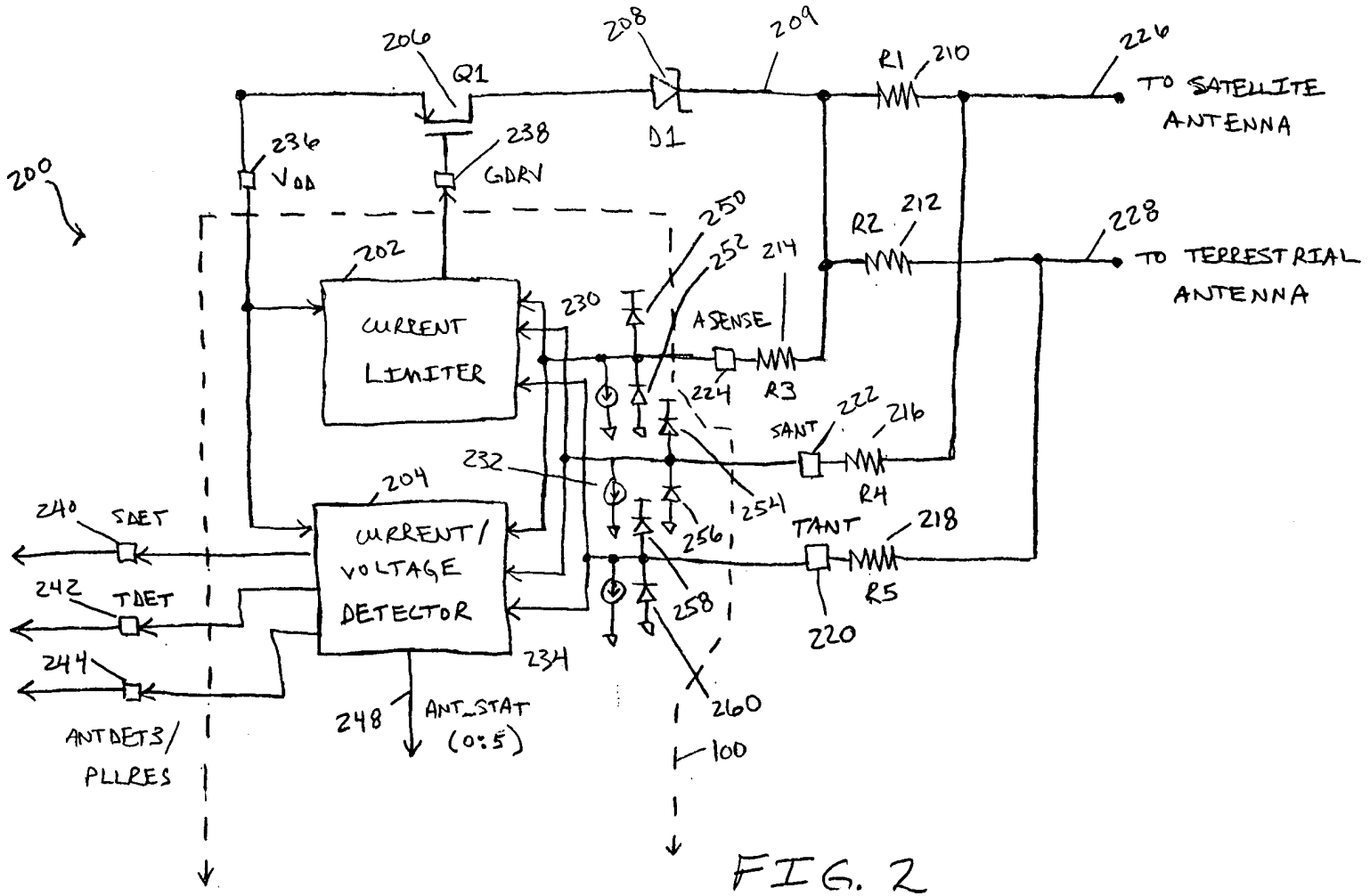
200
206
Q1
208
D1
209
R1
210
226
TO SATELLITE ANTENNA
236
VDD
238
GDRV
250
252
214
202
CURRENT LIMITER
230
ASENSE
224
R3
R2
212
228
TO TERRESTRIAL ANTENNA
222
SANT
216
R4
232
204
240
SDET
CURRENT/ VOLTAGE DETECTOR
254
256
TANT
218
R5
242
TDET
258
220
244
234
260
248
ANT_STAT (0:5)
100
ANTDET3/ PLLRES

FIG. 2

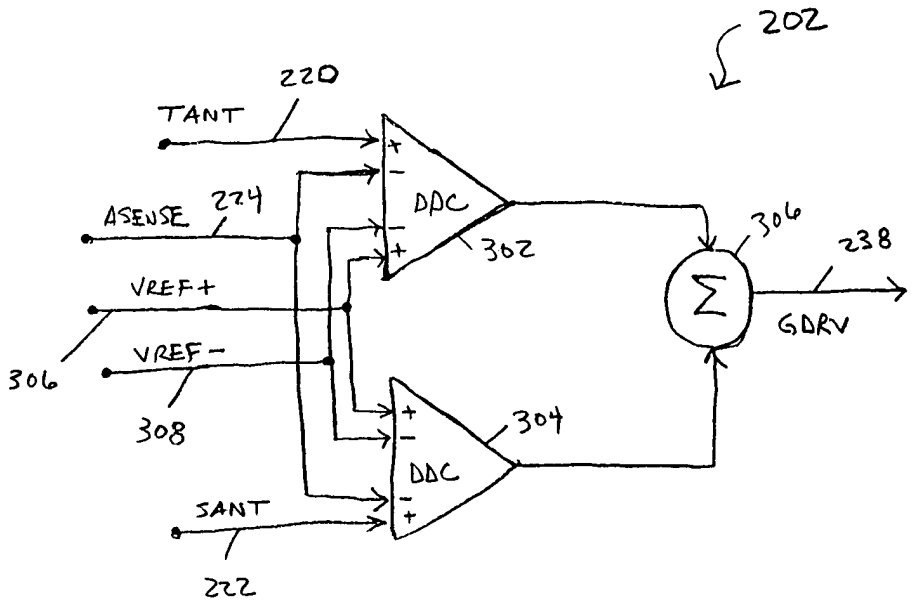
202
220
TANT
ASENSE
224
VREF+
VREF−
306
308
DAC
302
304
SANT
222
306
238
Σ
GDRV

FIG. 3

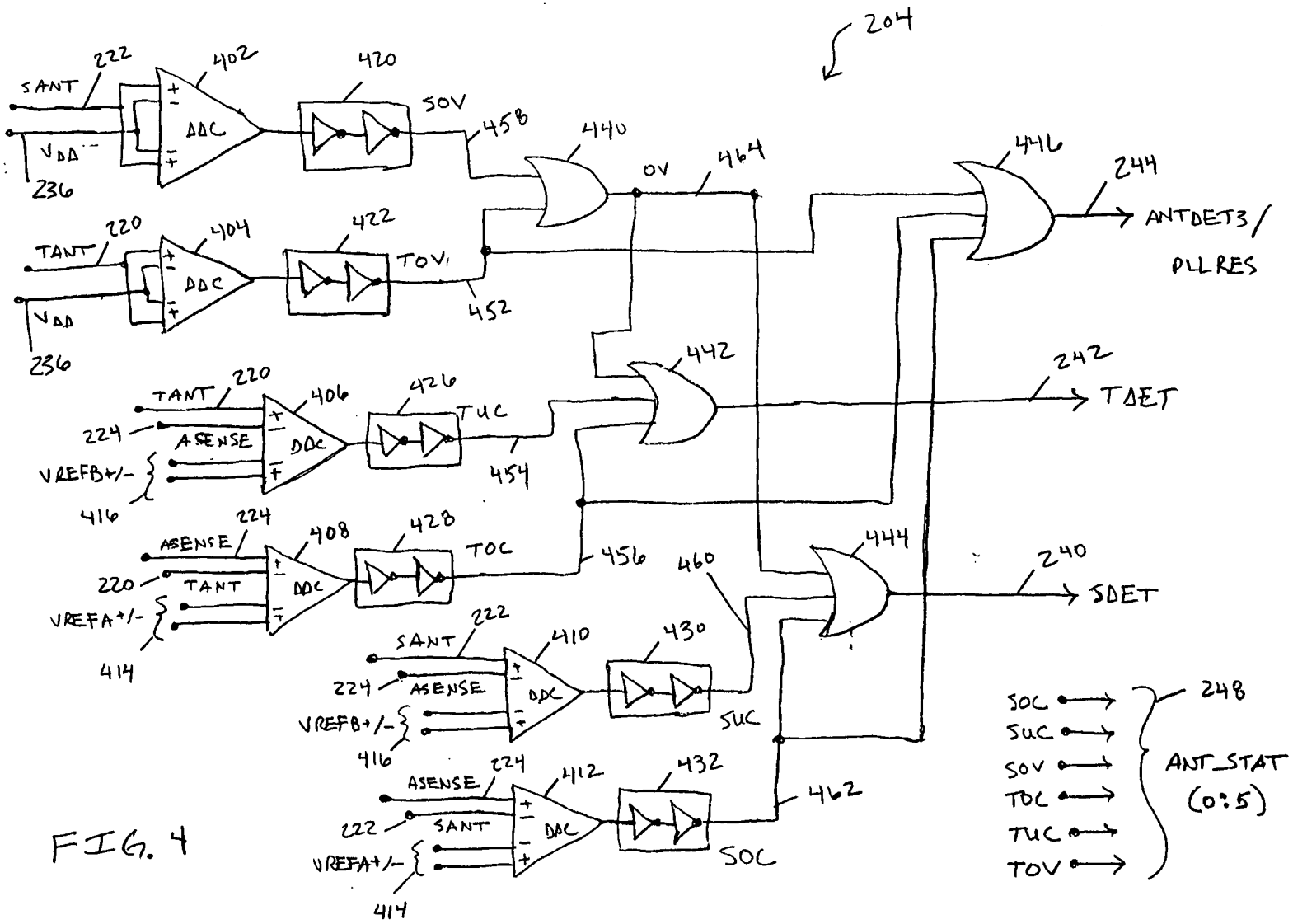
204
SANT
222
402
420
SOV
458
440
OV
464
446
244
ANTDET3/
PLLRES
VDD
236
TANT
220
404
422
TOV1
452
442
242
TDET
406
426
TUC
454
ASENSE
224
VREFB+/-
416
408
428
TOC
456
460
444
240
SDET
VREFA+/-
414
410
430
SUC
412
432
462
SOC
248
ANT_STAT
(0:5)

FIG. 4